

Claims

- [c1] 1. A method for generation of gasses contained in a salt solution by the steps of:
- (a) disposing one or more floating wind turbines on waters distant from a proximate shore;
 - (b) generating electricity by an electrical generator connected to each wind turbines; and
 - (c) extracting said gasses from a salt solution by means of electrolysis using said electricity.
- [c2] 2. The method of claim 1, wherein said floating wind turbines further comprise wind turbines affixed to navigable collection vessels at sea.
- [c3] 3. The method of claim 2, further comprising the steps of disposing said vessels with one or more predetermined geographic zones, each of said zones having a suitable wind velocity for operation of said wind turbines, being without established shipping lanes, and providing communication between the collection vessels within the zone and a command center.
- [c4] 4. The method of claim 3, wherein each wind turbine further comprises a multiplicity of blades having a con-

trollable angle of attack, the method further comprising adjusting the angle of attack to optimize power output.

[c5] 5. The method of claim 4, further comprising controlling said vessels by remote control.

[c6] 6. The method of claim 5, further retracting the blades of said turbines during collection vessel travel, and in area of high wind, so that the wind turbines are not damaged thereby.

[c7] 7. The method of claim 6, further comprising the step of locating one or more storage vessels within each predetermined zone for periodic transport of said gasses.

[c8] 8. The method of claim 7, further comprising the steps of:
(a) locating a sea based central transfer station for collecting said gasses; and
(b) pipelining of the gasses from the sea based central transfer station into a shore storage and purification facility.

[c9] 9. The method of claim 8, further comprising providing means for the remote-controlled docking of any two or more of said collection vessels at sea for transferring said gasses between said collection vessels.

- [c10] 10. The method of claim 9, further comprising disposing of a sea anchor by one or more of the collection vessels to reduce the drift of the vessel and to maintain the vessel with its bow facing into the wind.
- [c11] 11. The method of claim 10, further comprising:
- (a) providing a multiplicity of cables for maintaining the sea anchor in an anchoring position, and one or more retraction cables for retracting the sea anchor;
 - retracting the sea anchor into a storage tube; and
 - extracting the sea anchor from the storage tube into disposed mode.
- [c12] 12. The method of claim 11, further comprising, for each current wind speed and generator load, maximizing the torque from each electrical generator by the steps of:
- (a) increasing the number of blades in the turbine to an optimum number;
 - (b) increasing the area of each such blade to an optimum area;
 - (c) autonomously controlling each turbine blade angle to the optimum blade angle.
- [c13] 13. The steps of each of claims 1 through 12, wherein the gasses so produced are oxygen and hydrogen.